

**WACKER**

CREATING TOMORROW'S SOLUTIONS

VINNAPAS®

CONSTRUCTION | POLYMER POWDERS | WESTERN EUROPE

**PRODUCT OVERVIEW  
VINNAPAS® DISPERSIBLE  
POLYMER POWDERS**



# POLYMER CHEMISTRY – A KEY TO QUALITY

Polymer binders enhance two critical characteristics of all mortars and coatings: adhesion and flexibility. They ensure the quality and prolong the life expectancy of buildings while reducing material consumption and increasing creative freedom by making it possible to combine a wide variety of construction materials.

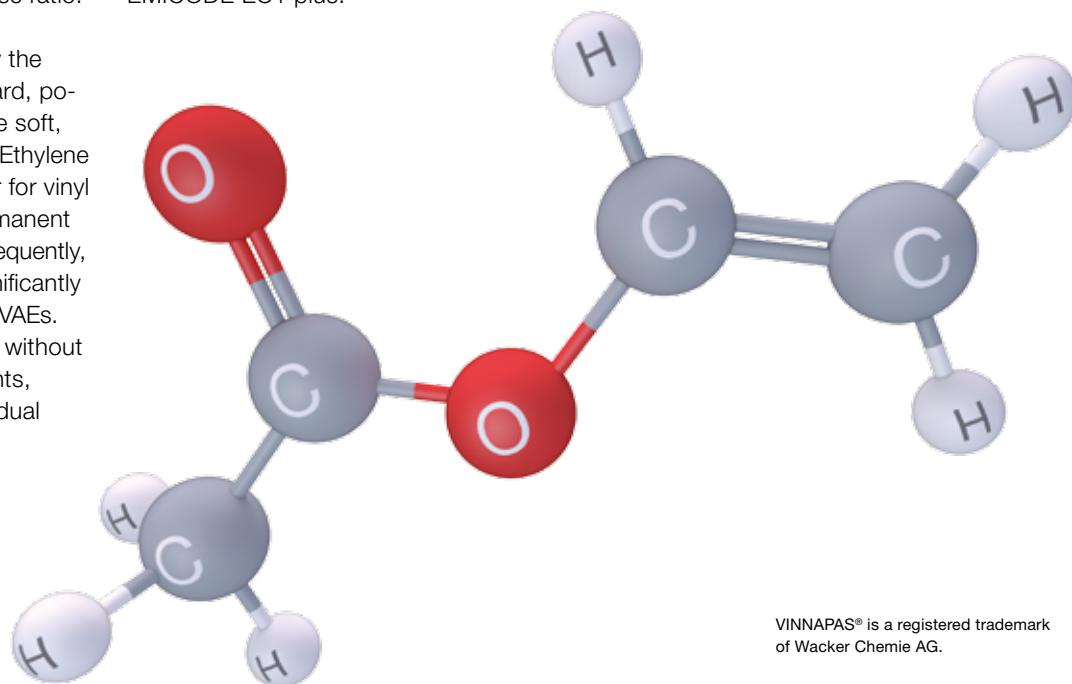
## Vinyl Acetate-Ethylene (VAE) – Serving the Megatrends of Today and Tomorrow

VINNAPAS® dispersions are co- and terpolymers based on vinyl acetate, ethylene and other monomers. Vinyl acetate-ethylene (VAE), in particular, combines technical performance with environmental benefits at an attractive cost-in-use ratio.

VAE dispersions are produced by the emulsion polymerization of the hard, polar monomer vinyl acetate and the soft, hydrophobic monomer ethylene. Ethylene functions as an optimal flexibilizer for vinyl acetate, which incorporating permanent flexibility into VAE polymers. Consequently, the use of plasticizers can be significantly minimized when formulating with VAEs. In addition, all grades are stabilized without the use of APEO-based surfactants, many of them also show low residual monomer content (<500 ppm).

## Compliance with Strict Labels

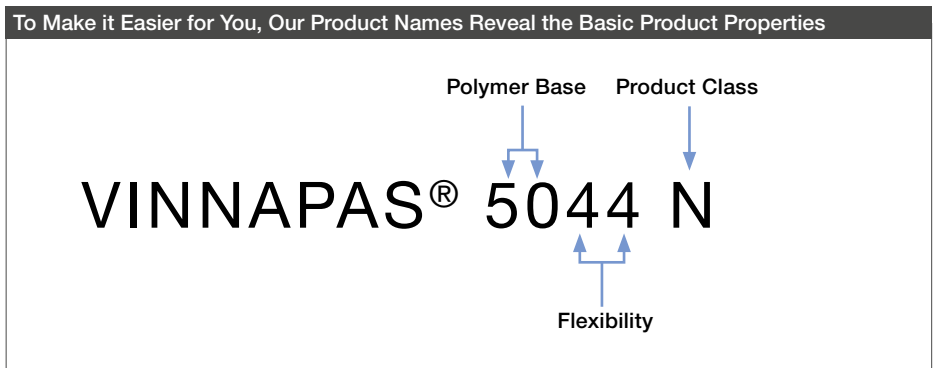
With our cutting-edge VINNAPAS® VAE binders, the construction and paints industries are equipped to meet stringent governmental regulations, as well as the requirements of internationally recognized ecolabels and certifications, such as Blue Angel, Green Seal GS-11, TÜV Süd, and EMICODE EC1 plus.



VINNAPAS® is a registered trademark  
of Wacker Chemie AG.

# FIND THE RIGHT GRADE EASILY

Our portfolio of VINNAPAS® dispersible polymer powders has been developed and optimized over the course of 55 years to offer you the perfect fit for your application, whether for today's or tomorrow's needs. To make it easier for you to choose the ideal product, we have divided our portfolio into product classes.



Polymer Base	
10 – 14	VAc
15 – 19	A
20 – 29	S-A
30 – 39	VC-E
40 – 49	VAc-E
50 – 59	VAc-E
60 – 69	VAc-others
70 – 79	VAc-E-others
80 – 89	VC-E-others

Flexibility	
00 – 09	Very hard
10 – 19	Hard
20 – 29	Semi-flexible
30 – 39	Flexible
40 – 49	Very flexible
50 – 59	Highly flexible

A = acrylate, E = ethylene, S = styrene,  
VAc = vinyl acetate, VC = vinyl chloride  
MMA = methyl methacrylate

## N = VINNAPAS® N Class – Neutral Effect on Rheology

These products provide a high degree of freedom in developing formulations and are ideal for various applications.

## E = VINNAPAS® E Class – Enhanced Properties

These products have enhanced properties in a number of applications and improve essential characteristics. They ensure improved workability, increased adhesion or water resistance, to name just a few.

## T = VINNAPAS® T Class – Thixotropic Expertise

These products are used in thixotropic tile adhesives and in troweling compounds.

## L = VINNAPAS® L Class – Leveling Optimization

These products create smooth surfaces by displaying excellent leveling properties. They are therefore ideal for self-leveling compounds.

## F = VINNAPAS® F Class – Flow Superiority

These products provide excellent flow properties without the need for any additional synthetic superplasticizers or casein. They are therefore ideal for self-leveling compounds that require an instant liquefying effect and a special rheology.

## H = VINNAPAS® H Class – Hydrophobic Excellence

These products have remarkable hydrophobic properties, making them ideal for all types of plasters and tile grouts as well as for ETICS (external thermal insulation composite systems).

# THE FAST TRACK – PRODUCT FINDER

Grade	Typical General Properties			Recommended Applications*
	Polymer Base	Flexibility	MFFT (ISO 2115) [°C]	
<b>Neutral</b>				
VINNAPAS® 4023 N	VAc-E	Semi-flexible	1	<b>Tile adhesives</b> , wall and joint fillers
VINNAPAS® 5010 N	VAc-E	Hard	4	<b>Tile adhesives, tile grouts, renders and plasters, wall and joint fillers</b>
VINNAPAS® 5043 N	VAc-E	Very flexible	0	<b>ETICS</b>
VINNAPAS® 5044 N	VAc-E	Very flexible	0	<b>ETICS, waterproofing membranes, concrete repair, wall and joint fillers</b>
<b>Enhanced</b>				
VINNAPAS® 5028 E	VAc-E	Semi-flexible	4	<b>Tile adhesives</b>
VINNAPAS® 7034 E	VAc-E-others	Flexible	0	<b>Renders and plasters, concrete repair</b> , tile adhesives, tile grouts, ETICS, wall and joint fillers,
VINNAPAS® 7055 E	VAc-E-others	Highly flexible	0	<b>Waterproofing membranes</b> , ETICS, concrete repair
VINNAPAS® 7210 E	VAc-E-others	Hard	7	<b>Tile adhesives</b> , tile grouts
VINNAPAS® 7220 E	VAc-E-others	Semi-flexible	5	<b>Tile adhesives</b> , tile grouts, renders and plasters
VINNAPAS® 8620 E	VAc-VC-E	Semi-flexible	3	<b>Tile adhesives</b> , tile grouts
<b>Hydrophobic</b>				
VINNAPAS® 3030 H	VC-E	Flexible	0	<b>Tile grouts</b> , renders and plasters
VINNAPAS® 4042 H	VAc-E	Very flexible	0	<b>ETICS, waterproofing membranes</b> , renders and plasters
VINNAPAS® 5048 H	VAc-E	Very flexible	0	<b>ETICS, renders and plasters, waterproofing membranes</b>
VINNAPAS® 5518 H	VAc-E	Hard	4	<b>Tile grouts, renders and plasters, waterproofing membranes</b>
VINNAPAS® 7031 H	VAc-E-others	Flexible	0	<b>Tile grouts, renders and plasters, wall and joint fillers</b> , waterproofing membranes, concrete repair, ETICS
VINNAPAS® 8031 H	VC-E-others	Flexible	0	<b>Tile grouts</b> , renders and plasters, waterproofing membranes
VINNAPAS® 8034 H	VC-E-others	Flexible	0	<b>Tile grouts, renders and plasters</b> , waterproofing membranes, ETICS
<b>Thixotropic</b>				
VINNAPAS® 5012 T	VAc-E	Hard	4	<b>Tile adhesives, wall and joint fillers</b>
VINNAPAS® 5021 T	VAc-E	Semi-flexible	4	<b>Tile adhesives, wall and joint fillers</b>
VINNAPAS® 5046 T	VAc-E	Very flexible	0	<b>Wall and joint fillers</b> , ETICS
<b>Leveling</b>				
VINNAPAS® 4410 L	VAc-E	Hard	4	<b>Self-leveling compounds</b>
VINNAPAS® 5023 L	VAc-E	Semi-flexible	4	<b>Self-leveling compounds</b>
VINNAPAS® 5025 L	VAc-E	Semi-flexible	4	<b>Self-leveling compounds</b>
VINNAPAS® 5111 L	VAc-E	Hard	4	<b>Self-leveling compounds</b>
VINNAPAS® 5222 L	VAc-E	Semi-flexible	4	<b>Self-leveling compounds</b>
<b>Flow</b>				
VINNAPAS® 5014 F	VAc-E	Hard	4	<b>Self-leveling compounds</b>
VINNAPAS® 7016 F	VAc-E-MMA	Hard	7	<b>Self-leveling compounds</b>

A = acrylate  
E = ethylene  
S = styrene  
VAc = vinyl acetate  
VC = vinyl chloride  
MMA = methyl methacrylate

\* Highly recommended  
Recommended

# THE PERFECT FIT – RECOMMENDATION BY APPLICATION

## Tile Adhesives

Grade	Product Benefit	Performance Attributes		
		Tensile Adhesion Strength after Open Time (EN 1346)	Tensile Adhesion Strength after Heat Aging (EN 1348)	Tensile Adhesion Strength after Water Immersion (EN 1348)
<b>Neutral</b>				
<b>VINNAPAS® 4023 N</b>	Good tensile adhesion strength on inorganic surfaces even after water immersion	▲ ▲	▲ ▲	▲ ▲
<b>VINNAPAS® 5010 N</b>	Very good tensile adhesion strength on inorganic surfaces, especially after heat aging.	▲ ▲	▲ ▲ ▲	▲
<b>Enhanced</b>				
<b>VINNAPAS® 5028 E</b>	Long open time and good tensile adhesion strength after water immersion.	▲ ▲ ▲	▲ ▲	▲ ▲
<b>VINNAPAS® 7210 E</b>	Long open time and very good tensile adhesion strength after water immersion and heat aging.	▲ ▲ ▲	▲ ▲ ▲	▲ ▲
<b>VINNAPAS® 7220 E</b>	Very good workability and excellent tensile adhesion strength after water immersion.	▲ ▲	▲ ▲ ▲	▲ ▲ ▲
<b>VINNAPAS® 8620 E</b>	Long open time and excellent tensile adhesion strength after water immersion.	▲ ▲ ▲	▲ ▲	▲ ▲ ▲
<b>Thixotropic</b>				
<b>VINNAPAS® 5012 T</b>	Very good tensile adhesion strength after standard conditions.	▲ ▲	▲ ▲ ▲	▲
<b>VINNAPAS® 5021 T</b>	Long open time and good tensile adhesion strength, especially after water immersion.	▲ ▲ ▲	▲ ▲	▲ ▲

## Tile Grouts

Grade	Product Benefit	Performance Attributes		
		Hydrophobic Effect	Workability	Cleaning Properties after Initial Setting
<b>Neutral</b>				
<b>VINNAPAS® 5010 N</b>	Very good workability and very good cleaning properties after initial setting.	---	▲ ▲ ▲	▲ ▲ ▲
<b>Hydrophobic</b>				
<b>VINNAPAS® 3030 H</b>	Excellent hydrophobic effect, very high mechanical strength and low stickiness.	▲ ▲ ▲	▲ ▲	▲ ▲
<b>VINNAPAS® 5518 H</b>	Strong hydrophobic effect, very good workability, high mechanical strength and good cleaning properties after initial setting.	▲ ▲	▲ ▲ ▲	▲ ▲ ▲
<b>VINNAPAS® 7031 H</b>	Hydrophobic effect and very good workability.	▲	▲ ▲ ▲	▲ ▲
<b>VINNAPAS® 8031 H</b>	Slight hydrophobic effect, good workability and low stickiness.	▲	▲	▲ ▲
<b>VINNAPAS® 8034 H</b>	Strong hydrophobic effect, good workability and low stickiness.	▲ ▲	▲	▲ ▲

Based on WACKER guide formulation

▲ ▲ ▲ Excellent    ▲ ▲ Very Good    ▲ Good    --- Neutral

## Self-Leveling Compounds

Grade	Product Benefit	Performance Attributes		
		Flow Support	Defoaming	Stabilization
<b>Leveling</b>				
<b>VINNAPAS® 4410 L</b>	Excellent defoaming properties for very smooth, flat surfaces and good stabilization against over-dosage of water.	▲▲	▲▲▲	▲▲▲
<b>VINNAPAS® 5023 L</b>	Good defoaming properties for smooth surfaces and specifically recommended for end products with melamine sulfates.	▲▲	▲	▲▲
<b>VINNAPAS® 5025 L</b>	Good defoaming properties for smooth surfaces and very good tolerance against over-dosage of water.	▲▲	▲	▲▲▲
<b>VINNAPAS® 5111 L</b>	Very good defoaming properties at low viscosity for very smooth, flat surfaces for end products with very low emissions.	▲▲▲	▲▲	▲
<b>VINNAPAS® 5222 L</b>	Very good defoaming properties at low viscosity for smooth, flat surfaces.	▲▲▲	▲▲	▲
<b>Flow</b>				
<b>VINNAPAS® 5014 F</b>	Instant plasticizing effect especially for pumpable systems with shear-thinning rheological properties.	▲▲▲	▲	▲
<b>VINNAPAS® 7016 F</b>	Instant plasticizing effect with casein-like rheology and very good self-healing effect especially for manually applied systems.	▲▲▲	▲	▲▲

## Wall and Joint Fillers

Grade	Product Benefit	Performance Attributes		
		Hydrophobicity	Thixotropy	Workability
<b>Neutral</b>				
<b>VINNAPAS® 5010 N</b>	Very good tensile adhesion strength on all surfaces and good workability.	---	---	▲▲
<b>Hydrophobic</b>				
<b>VINNAPAS® 7031 H</b>	Hydrophobic effect, very good workability and very good tensile adhesion strength.	▲▲	---	▲▲▲
<b>Thixotropic</b>				
<b>VINNAPAS® 5012 T</b>	Thixotropic, very good workability and very good tensile adhesion strength.	---	▲▲	▲▲▲
<b>VINNAPAS® 5021 T</b>	Thixotropic, very good workability, long open time and good tensile adhesion strength.	---	▲▲	▲▲▲
<b>VINNAPAS® 5046 T</b>	Strongly thixotropic, very good workability.	---	▲▲▲	▲▲▲

## Concrete Repair

Grade	Product Benefit
<b>Neutral</b>	
<b>VINNAPAS® 5044 N</b>	Very good tensile adhesion strength on all surfaces.
<b>Enhanced</b>	
<b>VINNAPAS® 7034 E</b>	Excellent workability and good tensile adhesion strength on all surfaces.

Based on WACKER guide formulation

▲▲▲ Excellent    ▲▲ Very Good    ▲ Good    --- Neutral

# ETICS

Grade	Product Benefit	Performance Attributes		
		Tensile Adhesion Strength	Impact Resistance	Hydrophobicity
<b>Neutral</b>				
VINNAPAS® 5043 N	Very good tensile adhesion strength particularly on organic surfaces, very high impact strength, and good workability.	▲▲▲	▲▲▲	---
VINNAPAS® 5044 N	Very good tensile adhesion strength particularly on organic surfaces, very high impact strength, and very good workability – versatile use in all ETICS formulations.	▲▲▲	▲▲▲	---
<b>Hydrophobic</b>				
VINNAPAS® 4042 H	Slight hydrophobic effect, very good tensile adhesion strength particularly on organic surfaces and very high impact strength.	▲▲▲	▲▲▲	▲▲
VINNAPAS® 5048 H	Strong hydrophobic effect, very good tensile adhesion strength particularly on organic surfaces and very high impact strength.	▲▲▲	▲▲▲	▲▲▲

## Waterproofing Membranes

Grade	Product Benefit	Adhesion on Critical (Especially Organic) Surfaces
<b>Neutral</b>		
VINNAPAS® 5044 N	Very good tensile adhesion strength on all surfaces and good crack-bridging properties.	▲▲▲
<b>Enhanced</b>		
VINNAPAS® 7055 E	Very good tensile adhesion strength particularly on all surfaces and very good crack-bridging properties even at low temperatures.	▲▲▲
<b>Hydrophobic</b>		
VINNAPAS® 4042 H	Slight hydrophobic effect and very good tensile adhesion strength.	▲▲▲
VINNAPAS® 5048 H	Very strong hydrophobic effect and very good tensile adhesion strength.	▲▲▲
VINNAPAS® 5518 H	Strong hydrophobic effect, very good workability and high mechanical strength.	▲

## Renders and Plasters

Grade	Product Benefit	Tensile Adhesion Strength	Hydrophobicity
<b>Neutral</b>			
VINNAPAS® 5010 N	Very good tensile adhesion strength on inorganic surfaces and good workability.	▲▲▲	---
<b>Enhanced</b>			
VINNAPAS® 7034 E	Excellent workability and very good tensile adhesion strength.	▲▲▲	▲
<b>Hydrophobic</b>			
VINNAPAS® 5048 H	Strong hydrophobic effect and very good tensile adhesion strength.	▲▲▲	▲▲▲
VINNAPAS® 5518 H	Strong hydrophobic effect, very good workability and very good tensile adhesion strength.	▲▲▲	▲▲▲
VINNAPAS® 7031 H	Hydrophobic effect, very good workability and very good tensile adhesion strength.	▲▲▲	▲▲
VINNAPAS® 8034 H	Strong hydrophobic effect, good workability and very good tensile adhesion strength.	▲▲▲	▲▲▲

Based on WACKER guide formulation

▲▲▲ Excellent    ▲▲ Very Good    ▲ Good    --- Neutral

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